Listing of Claims:

1-15. (Canceled)

16. (Previously Presented) A process for preparing a catalyst composition, which process comprises selecting a support having a surface area of at least 500 m^2/kg and less than 5000 m^2/kg, and depositing on the support:

silver metal,

a metal or component comprising rhenium, tungsten, molybdenum or a nitrate- or nitrite-forming compound, and

a Group IA metal or component comprising a Group IA metal having an atomic number of at least 37, and in addition potassium,

wherein the value of the expression $(Q_K / R) + Q_{HIA}$ is in the range of from 1.5 to 30 mmole/kg, wherein Q_{HIA} and Q_K represent the quantities in mmole/kg of the Group IA metal having an atomic number of at least 37 and potassium, respectively, present in the catalyst composition, the ratio of Q_{HIA} to Q_K is in the range of from 1:1 to 5:1, the value of Q_K is at least 0.01 mmole/kg, and R is a dimensionless number in the range of from 1.5 to 5, the units mmole/kg being relative to the weight of the catalyst composition.

17. (Previously Presented) A process as claimed in claim 16, wherein the value of R is 2.5, Q_K is in the range of from 0.1 to 30 mmole/kg, relative to the weight of the catalyst composition, and the ratio of Q_{HIA} to Q_K is in the range of from 1.1:1 to 5:1.

18. (Original) A process as claimed in claim 17, wherein the ratio of Q_{HIA} to Q_K is in the range of from 1:1 to 3.5:1.

19. (Original) A process as claimed in claim 16, wherein cesium represents at least 90 mole-% of the Group IA metals having an atomic number of at least 37.

20. (Original) A process as claimed in claim 16, wherein the surface area of the support is in the range of from 500 to 5000 m^2/kg, and

$$(Q_K / R) + Q_{HIA} = F \times SA,$$

wherein SA denotes the surface area of the support, in m^2/kg, and F is a factor having a value in the range of from 0.001 to 0.01 $mmole/m^2$.

21. (Original) A process as claimed in claim 20, wherein the value of F is in the range of from 0.002 to 0.008 $mmole/m^2$.

22. (Original) A process as claimed in claim 16, wherein

the surface area of the support is in the range of from 500 to 1500 m^2/kg, and the value of $(Q_K / R) + Q_{HIA}$ is in the range of from 1.5 to 12 mmole/kg; or

the surface area of the support is in the range of from 1500 to 2500 m^2/kg, and the value of $(Q_K / R) + Q_{HIA}$ is in the range of from 4 to 15 mmole/kg; or

the surface area of the support is in the range of from 2500 to 5000 m^2/kg, and the value of $(Q_K / R) + Q_{HIA}$ is in the range of from 5 to 25 mmole/kg.

23. (Previously Presented) A process as claimed in claim 16, wherein the process further comprises depositing on the support a rhenium co-promoter selected from the group consisting of one or more of sulfur, phosphorus, boron, and components comprising one or more of sulfur, phosphorus and boron.

24-45. (Canceled)

46. (Previously Presented) A process as claimed in claim 16, wherein cesium represents at least 99 mole-% of the Group IA metals having an atomic number of at least 37.

47. (Previously Presented) A process as claimed in claim 16, wherein substantially only cesium represents the Group IA metals having an atomic number of at least 37.

48. (Previously Presented) A process as claimed in claim 16, wherein

the surface area of the support is in the range of from 500 to 1500 m^2/kg, and the value of $(Q_K / R) + Q_{HIA}$ is in the range of from 2 to 6 mmole/kg; or

the surface area of the support is in the range of from 1500 to 2500 m^2/kg, and the value of $(Q_K / R) + Q_{HIA}$ is in the range of from 6 to 10 mmole/kg; or

the surface area of the support is in the range of from 2500 to 5000 m^2/kg, and the value of $(Q_K / R) + Q_{HIA}$ + is in the range of from 10 to 20 mmole/kg.

49. (Previously Presented) A process as claimed in claim 16, wherein the process further comprises depositing on the support lithium in a quantity of from 1 to 500 mmole/kg, relative to the total catalyst composition.

50. (Previously Presented) A process as claimed in claim 49, wherein the lithium is deposited in a quantity of from 5 to 50 mmole/kg, relative to the total catalyst composition.

51. (Previously Presented) A process as claimed in claim 16, wherein the surface area of the support is in the range of from 600 to 4000 m^2/kg.